DECISION RECORD

Decision: It is my decision to authorize the issuance of a 10 year grazing permit to BeverlyWilson for Comanche Hill South Allotment #65056. The permit will be for 17 AUs at 100% public land for 204 AUMs active use and 2 AUs at 100% public land for 24 AUMs suspended use. Any additional mitigation measures identified in the environmental impacts sections of the attached environmental assessment have been formulated into stipulations, terms and conditions. Any comments made to this proposed action were considered and any necessary changes have been incorporated into the environmental assessment.

Charles Wilson passed away recently and in accordance with laws and procedures, the permit passed to his wife, Beverly Wilson.

If you wish to protest this proposed decision in accordance with 43 CFR 4160.2, you are allowed 15 days to do so in person or in writing to the authorized officer, after the receipt of this decision. In the absence of a protest, this proposed decision will become the final decision of the authorized officer without further notice, in accordance with 43 CFR 4160.3. Please be specific in your points of protest. A period of 30 days following receipt of the final decision, or 30 days after the date the proposed decision becomes final, is provided for filing an appeal and petition for the stay of the decision, for the purpose of a hearing before an Administrative Law Judge (43 CFR 4.470).
The appeal shall be filed with the office of the Field Office Manager, 2909 West Second, Roswell, NM, and must state clearly and concisely your specific points.

Signed by T. R. Kreager — 4/03/01
Assistant Field Manager — Date

ENVIRONMENTAL ASSESSMENT
for
GRAZING AUTHORIZATION

ALLOTMENT 65059 SECTION 3

EA-NM-060-00-166

JULY 2000

U.S. Department of the Interior
Bureau of Land Management
Roswell Field Office
Roswell, New Mexico

Environmental Assessment for Grazing Allotment 65059

I. Background

A. Introduction

When authorizing livestock grazing on public range, the Bureau of Land Management (BLM) has historically relied on a land use plan and environmental impact statement to comply with the National Environmental Policy Act (NEPA). A recent decision by the Interior Board of Land Appeals, however, affirmed that the BLM must conduct a site-specific NEPA analysis before issuing a permit or lease to authorize livestock grazing. This environmental assessment fulfills the NEPA requirement by providing the necessary site-specific analysis of the effects of issuing a new grazing permit/lease on Allotment 65059.

The scope of this environmental assessment is limited to the effects of issuing a new grazing permit on Allotment 65059. Over time, the need could arise for subsequent management activities which relate to grazing authorization. These activities could include vegetation treatments (e.g., prescribed fires, herbicide projects), range improvement projects (e.g., fences, water developments), and others. Future management actions related to livestock grazing would be addressed in project-specific NEPA documents as they are proposed.

B. Purpose and Need for the Proposed Action

The purpose of issuing a new grazing permit would be to authorize livestock grazing on public range on Allotment 65059. The permit would need to specify the types and levels of use authorized, and the terms and conditions of the authorization pursuant to 43 CFR 4130.3, 4130.3-1, 4130.3-2 and 4180.1.

C. Conformance with Land Use Planning

Upon review of the Roswell Resource Management Plan/Environmental Impact Statement (Bureau of Land Management 1997), the proposed action was found to conform with the Record of Decision as required by 43 CFR 1610.5-5.

D. Relationships to Statutes, Regulations, or Other Plans

The proposed action and alternatives are consistent with the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1700 et seq.); the Taylor Grazing Act of 1934 (43 U.S.C. 315 et seq.), as amended; the Clean Water Act (33 U.S.C. 1251 et seq.), as amended; the Endangered Species Act (16 U.S.C. 1535 et seq.) as amended; the Public Rangelands Improvement Act of 1978 (43 U.S.C. 1901 et seq.); Executive Order 11988, Floodplain Management; and Executive Order 11990, Protection of Wetlands.

II. Proposed Action and Alternatives

A. Proposed Action: (Existing Situation)

To authorize the grazing permit on the Comanche Hill - South, allotment #65059. The grazing permit on allotment #65059 for 17 AUs at 100% public land for 204 AUMs active use and 2 AUs at 100% public land for 24 AUMs suspended use. Specifically, to authorize a grazing permit based on the above livestock numbers from March 1 to the last day of February of each year at 100% public land.

B. No Grazing Alternative:

No grazing would be authorized on federal land under this alternative. The No Grazing alternative was considered, but not chosen in the Rangeland Reform Environmental Impact Statement (EIS) Record of Decision (ROD) (p. 28). The elimination of grazing in the Roswell Field Office Area was considered but eliminated by the Roswell RMP/ROD (pp. ROD-2).

III. Affected Environment

General Setting

Allotment 65059 lies within the Roswell Grazing District established subsequent to the Taylor Grazing Act. Grazing authorizations on Public Lands inside the Grazing District Boundary is governed by Section 3 of the Taylor Grazing Act.

The Comanche Hill - South Allotment #65059 is located approximately 10 miles east of Roswell and to the south of U. S. Highway 380 at the junction with New Mexico State Highway 409.

The current pasture and land status for the allotment is depicted on the attached allotment map. The approximate acreage for Allotment #65059 is 4506 acres and has 1041 acres of Public Land.

In the early 1980's the allotment was placed in the Custodial (C) category. Vegetative and condition data for this allotment is limited. An initial vegetative inventory was done in 1979. In 2000 production and ground cover data was collected on the better blocked public lands within the allotment. This data indicates condition and ground cover, including litter and vegetation, is satisfactory within the allotment. Vegetative diversity is present and is improving. The results of these studies are incorporated in the data used for this assessment. See Attachment 1 for data summary and Desired Plant Community objectives.

The following resources or values are not present or would not be affected by the authorization of livestock grazing on Allotment #65059; Prime/Unique Farmland, Cultural Resources, Native American Religious Concerns, Wild and Scenic Rivers, Hazardous Wastes, Areas of Critical Environmental Concern, Noxious and Invasive Weeds and Minority/low Income populations.

Cultural inventory surveys would continue to be required for federal actions involving surface disturbing activities except where criteria to exempt surveys are met. Eligible and potential eligible sites would continue to be protected from damage or archaeologically treated to mitigate damage.

The impact of the proposed action and alternatives to minority or low-income populations or communities has been considered and no significant impact is anticipated.

A. Affected Resources

1. Soils: There are several soil units on this allotment including; Holloman-Gypsum Land (HrC), Holloman (Hp), Holloman-Gypsum Land (HSE), Balmorhea loam (Ba). The public lands are in the HrC, HSE and HP soil map units.

The majority of these soils exhibit moderate permeability. Their available water capacity runs from moderate to high. Runoff characteristics vary from slow to medium. Water erosion hazard for the soils is slight to moderate. While soil blowing hazard is generally very high. For detailed soil information, please refer to the Soil Survey of Chaves County, New Mexico, Southern Part, published by the Natural Resource Conservation Service (NRCS). A copy of these publications may be reviewed at the BLM Roswell Field Office or a local NRCS office.

Allotment 65059 is in the Southern Desert Major Land Resource Area. Principal range sites are Gyp Upland SD-3, Loamy SD-3 and Salt Meadow SD-3.

2. Vegetation:

The primary ecological (range) sites on this allotment are Gyp Upland SD-3, Loamy SD-3 and Salt Meadow SD-3. There are inclusions of Salty Bottomland SD-3 within some sites. The public lands on this allotment are within the Gyp Upland SD-3 and Loamy SD-3 ecological (range) sites.

The potential plant community for these ecological sites include; alkali sacaton, tobosa grass, sand dropseed,

plains bristlegrass, black grama, blue grama, gyp grama and three awn species. Shrub species which occur are fourwing saltbush, morman tea, mesquite, various opuntia species and broom snake weed. Vegetative monitoring data is limited. An inventory was done on this allotment in 1979. Vegetative production and ground cover data was collected in 2000. Data at this time places the public lands in a mid ecological rating.

The present plant community is primarily warm season perennial grasses and forbs with a shrub component of fourwing saltbush and morman tea. Dominant grass species include gyp grama, black grama, sand dropseed, tobosa grass, alkali sacton, three awns, ring muhly and vine mesquite. The shrub community is primarily fourwing saltbush, opuntia species, and morman tea. Forbs include coldenia species, globemallow, and numerous annual forbs.

The RMP/EIS established resource objectives for the various plant community types. Refer to the attached Data Summary Tables (Attachment #1) which depict the allotment community average as it relates to the Desired Plant Community objectives for the Grassland Communities. The percentages of grasses, forbs, and shrubs actually found at a particular location will vary with recent weather conditions, past resource uses and the potential of the site. The data used for this assessment is available at the Roswell Field Office.

3. Wildlife:

Raptors that are frequently associated with the vegetation types on this allotment are the red-tailed hawk, swainson's hawk, ferruginous hawk, roughlegged hawk, common nighthawk, and the american kestrel.

Game bird species in this areas include the scaled quail, and the mourning dove. Various water fowl species are present at times through out the year on the shallow salt lakes located on the private lands.

Other bird species that are usually observed are the turkey vulture, roadrunner, chihuahuan raven, great-horned owl, burrowing owl, northern flicker, loggerhead shrike, western meadowlark, western kingbird, pyrrhuloxia, horned lark, and other passerine birds.

Many species of mammals occur on or utilize this allotment. The diversity of small mammals provide for an excellent prey base for carnivores such as the coyote, gray fox, bobcat, raccoon, badger, hooded skunk and striped skunk.

Mammals that provide a prey base include the black-tailed jack rabbit, desert cottontail, spotted ground squirrel, pocket mice, deer mouse, kangaroo rats, northern grasshopper mouse, harvest mice, and the white throated woodrat.

Reptiles and amphibians that inhabit the area are the dune sagebrush lizard, southern prairie lizard, lesser earless lizard, side-blotched lizard, longnose leopard lizard, sixlined racerunner, tree lizard, skinks, western diamond back, western rattlesnake, coachwhip, spadefoot toads, western box turtle, and the yellow mud turtle.

4. Threatened/Endangered Species:

Federal threatened, endangered and candidate species as well as state-listed threatened or endangered species potentially occurring within the proposed project area will be analyzed in this document.
There are no known Federal threatened and endangered species or critical habitat within the allotment.

However, there are several Federal Candidate and State listed species that may occupy or utilize the area. These include the swift fox, mountain plover, and the black-tailed prairie dog. For a detailed description of the range, habitats, and potential threats to the swift fox refer to the Biological Opinion (AP11-38) in the RMP.

Mountain Plover (Federally Proposed asThreatened)

The mountain plover has been petitioned to be listed as a federally listed threatened species under the

Endangered Species Act. Until a determination is made by the USFWS, actions occurring within this species range and habitat must be analyzed and treated as listed species.

The mountain plover is associated with shortgrass and shrub-steppe landscapes throughout its breeding and wintering range. Historically, on the breeding range, it occurred on nearly denuded prairie dog towns (Knowles et al. 1982, Olson-Edge and Edge 1987) and in areas of major bison concentration. All of the endemic grassland birds evolved within a grassland mosaic of lightly, moderately, and heavily grazed areas, and mountain plovers are considered to be strongly associated with sites of heaviest grazing pressure, to the point of excessive surface disturbance (Knopf and Miller 1994, Knopf 1996b). Short vegetation, bare ground, and a flat topography are now recognized as habitat-defining characteristics at both breeding and wintering locales. Most mountain plovers breed in Colorado and Montana; breeding also occurs in Wyoming, New Mexico, Arizona, Nebraska, Utah, Kansas, Oklahoma, and Texas.

Surveys: Information was taken from the Federal Register Notice and the Roswell RMP. Statewide surveys have been conducted as well as area surveys by S. Williams. No known breeding populations or wintering locales have been found. Specific surveys for this action were not conducted since recent surveys in May and June of 1998 were completed.

Special Status Species That May Occur on this Allotment:

Black-tailed Prairie Dog (Federally Proposed as Threatened)

The prairie dog was petitioned to be listed as a federally listed threatened species under the Endangered Species Act. After an extensive review, a determination was made by the USFWS, to place this species in the candidate status and will be reviewed every year. This candidate status species are not granted any protection under the Endangered Species Act, but it is BLM policy to manage in such a manner to keep these species from becoming listed. There for it will be analyzed in this document.

The black-tailed prairie dog is a highly social animal that lives in colonies or towns which cover from one acre to tens of thousands of acres of grassland habitat. This species is widespread throughout the high plains area in Arizona, New Mexico, Oklahoma, Texas, Kansas, Nebraska, Colorado, the Dakotas, Montana, and Wyoming.

Numerous ungulate species seek out and take advantage of the highly nutritional vegetation created by prairie dogs continuously clipping it. Besides attracting ungulates, prairie dogs and their colonies also are used by a wide variety of other species of wildlife. A number of species prey on prairie dogs, and in the case of the black-footed ferret, became very specialized in killing this communal rodent. Because to black-tailed prairie dog influences ecosystem functions through its activities in unique and significant ways, it is considered by some as a keystone species of the prairie grasslands. There are no known prairie dog towns within this allotment.

5. Livestock Management:

The allotment has three pastures. Two of these pastures are relativity small in size. The allotment is grazed year long with a cow-calf herd and seasonally weaner calves and heifers. This herd is comprised of calves from other ranches operated by the permittee.

Much of the lower portion of the allotment is infested with rayless goldenrod (a poisonous plant) which limits grazing use during fall and winter. The small pasture on the west side of the allotment was hand grubbed to remove the goldenrod; the second pasture in the northeast is relative free of goldenrod and is used to graze the cow-calf herd from mid October to mid April.

6. Visual Resources:

The portions of the allotment are located in Class II, III and IV Visual Management Areas. The Class II rating means that any changes in any basic elements (form, line, color, texture) caused by a management activity should not be evident in the landscape. A contrast may be seen but should not attract attention. The Class III rating means that contrasts to the basic elements caused by a management activity may be evident and begin to attract attention in the landscape. The changes, however should remain subordinate to the existing landscape. The Class IV rating means that contrasts may attract attention and be a dominant feature in the landscape in terms of scale. However, the changes should repeat the basic elements of the landscape.

7. Air Quality:

The allotment is in a Class II area for the Prevention of Significant Deterioration of air quality as defined in the federal Clean Air Act, which allows a moderate amount of air quality degradation. Air quality is generally good, Winds are typically southeasterly during the summer, and becoming southwesterly in the winter and early spring. Winds average 10 miles per hour in the fall and 16 miles per hour in the spring, with peak velocities reaching 50 miles per hour. These conditions rapidly disperse air pollutants in the region.

8. Recreation:

Recreation opportunities are focused around hunting and watchable wildlife. Mule deer and game birds, such as quail and dove are taken during hunting seasons. Legal and physical access to public lands located on this allotment are through state lands, county maintained roads and roads existing on public lands. Off Highway Vehicle designation for public lands within this allotment are classified as "Limited" to existing roads and trails.

9. Caves and Karst:

This allotment is located within a designated area of High Karst and Cave Potential.

Although a complete significant cave or karst inventory has not been completed for the public lands located in this grazing allotment, a significant cave or karst feature is known to exist within this allotment. Monitoring of the Cave/Karst feature will be necessary to determine if protective measures are required in the future.

10. Water Quality - Surface Water:

The Pecos River flows for approximately 6 miles just beyond the west and south allotment boundaries. Allotment 65059 is on the river reach between the headwaters of Brantley Reservoir and Salt Creek, which is identified as Segment 2206 by the New Mexico Water Quality Control Commission (WQCC). Under the authority of the federal Clean Water Act, the WQCC (2000) designated uses for streams in New Mexico. Designated uses for Segment 2206 include irrigation, livestock watering, wildlife habitat, secondary contact (e.g., wading), and a warmwater fishery.

The WQCC (1995) also established water quality standards to protect the designated uses, and directs periodic water quality assessments to ensure that standards are met. According to the New Mexico Environment Department (NMED), Segment 2206 is currently meeting the standards for all its designated uses (Hogge, 1998; NMED, 1998; NMED, 1999).

Most of the allotment is in a low-lying area between the Pecos River and the bluffs to the east. Numerous shallow ephemeral basins called the Chain Lakes are found here, virtually all of them on private land. The high chloride content of the shallow ground water makes these basins barren salt flats.

Mr. Wilson and the BLM have incorporated best management practices (BMPs)[1] into the operation of the ranch. These BMPs include:

1. Rangeland Monitoring - by assessing the allotment for vegetation production, composition and ground cover.
2. Controlling Livestock Distribution - through fencing, and moving livestock among available pastures.

Water Quality - Ground Water:

The allotment lies near the center of the Roswell Underground Water Basin (New Mexico State Engineer, 1995). Ground water is found in the alluvial aquifer at depths greater than 20 feet in the northern and eastern parts of the allotment, but at or near the surface in the bottomland (Wilkins and Garcia, 1995). The allotment is in an area of high ground-water chloride concentrations.

11. Floodplains:

The properties of any stream or river are the result of the interaction of its channel geometry, streamflows, sediment load, channel materials, and valley characteristics (Rosgen, 1996). The form and fluvial processes of the Pecos River have been modified by the construction of dams, which have drastically altered the streamflow and sediment regimes of the river. Flooding is less frequent and less severe than prior to dam construction, and sediment loads have been greatly reduced. As a result, the channel has become moderately entrenched, and exhibits much less lateral migration.

Flow regulation with the dams has also changed the extent, character, and condition of the riparian area on the river (Durkin et al., 1994). Seasonal flooding is required for obligate riparian vegetation, and sediment deposition on floodplains is important for riparian succession.

Floodplain function on Allotment 65059 is also heavily influenced by development just beyond its boundaries. The Bitter Lake National Wildlife Refuge (BLNWR) occupies approximately ten square miles of the 100-year floodplain approximately one mile upriver. The refuge has altered the entire river system by channelizing portions of the river, constructing miles of levees to create its impoundments, and manipulating the hydrology of the area to regulate water levels.

In addition, U.S. 380 forms the northern boundary of the allotment. The highway embankment greatly affects the hydraulics of the river floodplain on the allotment during flood flows, though the bridge crossing is performing well at present (U.S. Army Corps of Engineers, 1999).

For administrative purposes, the 100-year floodplain provides the basis for floodplain management on public lands. It is based on maps prepared by the Federal Emergency Management Agency (1983). Of 4506 total acres on the allotment, 1297acres are in the 100-year floodplain. This includes 1264 acres of private land, but only 33 acres of BLM land, which is found in the NE¼SW¼ Section 11, T11S R25E. Current floodplain development on the allotment consists of several miles of roads and fence.

12. Riparian/Wetland Areas:

The riparian area along the Pecos River exists as a narrow band of vegetation, therefore is not found on Allotment 65059. Some wetland species are found, however, on the bottomland. They are typically indicators of the saline conditions, and include alakali sacaton, pickleweed, inland saltgrass, seepwillow, and saltcedar along with other forb species.

---

[4] Best management practices (BMPs) are activities, practices, or procedures designed to prevent or reduce water pollution. BMPs include, but are not limited to structural or nonstructural controls, changes in management practices, and operation and maintenance procedures. BMPs can be applied before, during, or after pollution-producing activities to reduce or eliminate the introduction of pollutants into receiving waters.

IV. Environmental Impacts

Impacts common to all alternatives:

There will be no affect to the proposed threatened black-tailed prairie dog and Mountain plover since no known populations exist within the area. Potential habitat does occur but the proposed action and alternatives would not impact these areas from becoming utilized or inhabited.

A. Impacts of the Proposed Action

1. Soils:

Under a normal precipitation regime the level of permitted use as described in the proposed action has not had any adverse impact to the current soil conditions. Some soil loss would continue to occur due to the windy conditions that prevail in this region during parts of the year. If vegetative cover remains stable soil loss may be minimized.

2. Vegetation:

The continuance of the permitted use at the current use levels authorized by the expiring permit is not anticipated to have any adverse impact to the current vegetative conditions under a normal precipitation regime. The vegetation will continue to be grazed and trampled by domestic livestock as well as other herbivores such as well rabbits, rodents and insects. Under the proposed action and a normal precipitation regime, it is not anticipated that a significant change in the vegetative composition or amount available for use will occur. The continuance of the present livestock management practices is not anticipated to alter the vegetative composition. Ecological condition and trend is expected to remain stable or improve over the long term at this permitted number.

3. Wildlife:

Domestic livestock will continue to utilize vegetative resources needed by a variety of wildlife species for life history functions within this allotment. The magnitude of livestock grazing impacts on wildlife is dependent upon the species of wildlife being considered, and its habitat needs. Cover habitat for wildlife will remain the same as the existing situation. Maintenance and operation of existing waterings will continue to provide dependable water sources for wildlife, as well as livestock.

4. Threatened/Endangered Species:

Under the proposed action there would be no affect to Federal threatened and endangered species since there are no known T/E occurrences within this allotment.

5. Livestock Management:

Under the proposed action there would be no impacts to the current livestock management. Allotment 65059 would continue to be grazed on a yearlong basis.

6. Visual Resources:

Visual resources will be managed to meet the Visual Resource Management (VRM) classes. All proposed management activities will be evaluated with regard to visual resource management and those projects that are compatible with the character of the natural landscape will be encouraged. No management actions should be proposed that would degrade visual quality to the extent that a change in any VRM class will result.

7. Air Quality:

The impacts to air quality would not change from the current situation. A minor amount of air quality degradation would continue.

8. Recreation:

Grazing would have little or no affect on the recreational opportunities. Legal access to this parcel of public land would still remain available.

9. Significant Caves/Karst:

Continued grazing of the allotment may affect significant caves or karst resources if protective measures are not followed. If monitoring determines that significant caves or karst features are being affected by grazing, additional protective measures will be required. The protective measures could include, but are not limited to, the following actions: Fencing sinks, cave entrances or arroyos from multiple-use impacts; removing check-dams, erosion control projects and stock ponds; closing roads; no chemical vegetation removal. The area around significant caves or karst features should be treated sensitively, so no adverse impacts affect the cave or karst feature.

10. Water Quality - Surface Water:

In general, livestock grazing is considered a potential cause of nonpoint source pollution, with sediment as the primary contaminant. Bacteria and nutrients are other potential contaminants that can be related to livestock grazing. Authorizing livestock grazing on the allotment, however, is not expected to significantly affect water quality in the Pecos River. The BMPs that have been implemented have reduced the potential for water quality impairment. Also, the NMED conducted an intensive assessment of Pecos River water quality in 1997. They concluded that no water quality standards have been exceeded in the past ten years on Segment 2206 (NMED 1998).

Significant impacts to the shallow basins on the allotment are not expected either. The areas that most susceptible to livestock impact are those areas of high salinity, but they are little utilized by livestock. The amount of palatable forage produced is limited and makes the water less desirable to livestock.

Water Quality - Ground Water:

Livestock grazing would not be expected to have a significant impact on ground-water quality under either management alternative. Livestock would be dispersed over the allotment, and the soil would generally filter potential contaminants.

The WQCC has the primary responsibility for ground-water quality management in New Mexico. In their most recent report on water quality in New Mexico, the WQCC (1998) did not find livestock grazing on rangelands to be an important potential source of contamination to ground water.

Wilson (1981) also discussed potential sources of ground-water contamination and the relative vulnerability of aquifers in New Mexico. He identified animal confinement facilities (e.g., dairies, feedlots) as potential sources of contamination elsewhere in New Mexico, including areas in the Pecos valley downstream from the allotment. Wilson did not, however, identify livestock grazing on rangelands as an important potential source of ground-water contamination.

11. Floodplains:

The primary influences on floodplain function on the allotment would continue to be the reduction in the frequency and magnitude of peak flows on the river, development on BLNWR, and the U.S. 380 embankment. Whether or not grazing is authorized on Allotment 65059 would have little additional effect.

There would be little change to the level of development on the Pecos floodplain under the Proposed Action. Roads and fences would continue to be used and maintained. Potential development on private land that is unrelated to livestock grazing would not be affected.

Livestock grazing under either alternative would not add to cumulative effects to the floodplain beyond the current level of development. The No-Grazing Alternative might improve floodplain function slightly because vegetation cover would increase, and some roads and fences might be removed or abandoned. The improvement expected under the No-Grazing Alternative would be insignificant, however, because current livestock impacts are minor compared to all other impacts to the floodplain, and because additional fences might be constructed.

12. Riparian/Wetland Areas:

Under the Proposed action, utilization of grass species, such as alkali sacaton, would be heavy within the floodplain due to annual use of the area during the growing season. Use of the bottomland is limited in the dormant season due to the goldenrod found there. The permitted use level does appear sustainable based on monitoring data.

B. Impacts of the No Livestock Grazing Alternative.

The No Livestock Grazing Alternative has been previously analyzed at the National level in the Rangeland Reform '94 EIS and in the Roswell RMP/EIS. An in depth analysis of this alternative will not be made in this document. General impacts under this alternative would include no new rangeland improvement and the removal of existing rangeland improvements unless a determination was made that they were beneficial to other uses. Since no grazing authorizations on public lands would be permitted, livestock operators grazing lands adjoining Federal lands would be responsible for preventing the unauthorized use of these Federal lands. The BLM would not fence these lands. Rangeland administrative emphasis would shift to issuing crossing permits to or from nonfederal land inholdings and resolving unauthorized use.

Under the No-Grazing Alternative, some roads could be abandoned and fences removed, but any changes to floodplain function would be minor compared to other impacts. Also, new fences might be constructed to prevent livestock from moving onto public rangeland. Vegetation cover and diversity would probably increase somewhat on the rangelands, and localized impacts, such as cow trails, might revegetate over time.

Under the No-Grazing Alternative, the condition of vegetation in the floodplain and wetland areas would improve somewhat. Enhancements in vegetative cover and diversity, however, would continue to be limited by the regulation of river flows and channel entrenchment, which promote the growth of saltcedar and other exotic species. Grasses would initially increase following the exclusion of livestock, but plant vigor could decline from lack of vegetation removal, making ground cover species rank. Because livestock grazing would not be permitted under this alternative, the range program would be less likely to implement range improvement projects, such as brush control and exotic species control.

V. Cumulative Impacts

A cumulative impact is defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time" (40 CFR 1508.7).

All authorized activities which occur on BLM land can also take place on state and private lands, with the possibility of decreased management towards resource these resource concerns. Many of the actions which could contribute to cumulative impacts have occurred over many years. Impacts from open-range and yearlong livestock grazing in the last century are still being addressed today and may continue on adjacent land owners.

The proposed action and alternatives would not add incrementally to the cumulative impacts to sensitive

species or to the overall rangeland health. The conclusion that impacts to these resources from grazing authorization would not be significant are discussed in Section IV of the EA. Under alternatives 1, and especially 2, negative incremental impacts would be expected to be less than under the Proposed Action because the allotment would be more intensively managed and take into account lesser prairie chicken habitat needs.

Cumulative impacts to Pecos River water quality from grazing on Allotment 65059 would not be expected to be significant. The intensive assessment of the Pecos River by the NMED also included Segment 2207 (Sumner Dam to Salt Creek) immediately upstream of Segment 2206. Besides rangelands, potential sources of pollutants in Segments 2206 and 2207 include irrigation return flows, dairies, municipal and industrial sources, mineral development, and road construction and maintenance. Even considering all these potential pollution sources, neither segment had a documented exceedance of any water quality standard.

Cumulative impacts to ground-water quality from grazing on Allotment 65059 would be negligible. Grazing impacts would be insignificant when compared to other potential sources of contamination, such as saline intrusion and agriculture.

If the No-Grazing alternative were chosen, some adverse cumulative impacts to resource would be eliminated, but others would continue. Grazing would no longer be available as a vegetation management tool, and BLM lands within the allotment would be less intensively managed. For example, preferred grasses would likely to become decadent without some livestock use.

VI. Residual Impacts

The area has been grazed by livestock since the early part of the 1900's if not longer. Recent vegetative monitoring studies have shown that grazing , at the current permitted numbers of animals, is sustainable. If the mitigation measures are enacted, then there would be no residual impacts to the proposed action

VII. Mitigating Measures And/Or Permit/Lease Conditions

Vegetation monitoring studies will continue to be conducted and the permitted numbers of livestock will be adjusted if necessary. If new information surfaces that livestock grazing is negatively impacting other resources, action will be taken to mitigate the impacts.

VIII. Fundamentals of Rangeland Health

The fundamentals of rangeland health are basic components of healthy rangelands and guiding principles for the development of standards and guidelines for livestock grazing. The fundamentals are identified in 43 CFR §§4180.1 and pertain to watershed function, ecological precesses, water quality and habitat for threatened and endangered (T&E) species or other special status species. Based on the best available data and professional judgement, this EA addresses the fundamentals of Rangeland Health.

Field Office Staff Involvement/Review

John Spain - Rangeland Management Specialist
Rand French - Wildlife Management Biologist
Jerry Ballard - Outdoor Recreation Planner
Jim Schroeder - Watershed Specialist
Pat Flannary - Archeologist

Literature Cited

Durkin, P. M. Bradley, E. Muldavin, and P. Mehlhop. 1994. A riparian/wetland vegetation community classification of New Mexico: Pecos River basin. Vol. 1. Final Rep. Submitted to New Mex. Environ. Dept. by New Mex. Nat. Heritage Prog. 48 pp.

Hogge, David. 1998. Personal communication. New Mex. Env. Dept., Surf. Water Qual. Bur.

New Mexico Water Quality Control Commission. 2000. State of New Mexico standards for interstate and intrastate surface waters. 20 NMAC 6.1. 57 pp.

New Mexico Environment Department. 1998. Record of decision concerning the development of total daily maximum loads for segments 2206 and 2207 of the Pecos River. Surf. Water Qual. Bur., Plan. and Eval. Sec. Santa Fe.

New Mexico Environment Department. 1999. Intensive water quality stream surveys, 1997. NMED/SWQ-99/1. 90 pp.

New Mexico State Engineer. 1995. Rules and regulations governing drilling of wells and appropriation and use of ground water in New Mexico. 166 pp.

Rosgen, D. 1996. Applied river morphology. Wildland Hydrology. Pagosa Springs, CO.

U.S. Army Corps of Engineers. 1999. Pecos River, Chaves County, New Mexico: channel capacity and riparian habitat planning study. Prepared for: Chaves County Flood Control Authority. USACE, Albuquerque District. 62 pp.

Wilkins, D.W. and B.M. Garcia. 1995. Ground-water hydrographs and 5-year ground-water-level changes, 1984-93, for selected areas in and adjacent to New Mexico. U.S. Geol. Survey Open-File Rep. 95-434. 267 pp.

ATTACHMENT 1
COMPARISON OF DESIRED PLANT COMMUNITY RESOURCE OBJECTIVES TO LONG TERM ALLOTMENT AVERAGE IN THE GRASSLAND (GR) COMMUNITY

ALLOTMENT : 65059 Public Land Only		PERCENT COVER OBJECTIVES					VEGETATIVE COVER BY PERCENT COMPOSITION OBJECTIVES			
PASTURE/ ECOLOGICAL SITE	ECOLOGICAL NAME	BARE GROUND (14 - 60%)	LITTER (8 - 44%)	SMALL & LARGE ROCK (0 -30%)	GRASS & FORBS (15 - 52%)	SHRUBS & TREES (3 - 12%)	GRASSES (30 - 85%)	FORBS (10-15%)	SHRUBS (1 - 10%)	TREES (- %)
01		43.38	17.88	0.00	35.75	2.98	93.71	2.98	3.31	0.00
042CY007NM	Loamy SD-3									
02		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
042CY006NM	Gyp Uplands SD-3									

N/A= Not Available

FINDING OF NO SIGNIFICANT IMPACT/RATIONALE

FINDING OF NO SIGNIFICANT IMPACT: I have reviewed this environmental assessment including the explanation and resolution of any potentially significant environmental impacts. I have determined the **proposed action** will not have significant impacts on the human environment and that preparation of an Environmental Impact Statement (EIS) is not required.

Rationale for Recommendations: The proposed action would not result in any undue or unnecessary environmental degradation. The **proposed action** will be in compliance with the Roswell Resource Management Plan and Record of Decision (October, 1997).

_____ _____

T. R. Kreager, Date
Assistant Field Office Manager - Resources

EA Number: NM-060-00-166 Allotment Numbers: 65059 Preparer: John Spain			Action Type: **GRAZING AUTHORIZATION**		
Resource / Activity	Not Present	Not Affected	**May Be Affected	Reviewer Surname	Date
Air Quality*					
Floodplains*					
Water Quality-Drinking/Ground*					
Soils/Watershed				Hydrologist	
Vegetation					
Livestock Grazing					
Invasive, Nonnative Species*				Rangeland Management Specialist	
Wastes, Hazardous or Solids*				Hazardous Waste Spec.	
Prime/Unique Farmlands*					
Lands/Realty/ROW				NRS/Realty Specialist	
Fluid Minerals				Petroleum Engineer	
Mining Claims					
Mineral Materials				Geologist	
Threatened or Endangered Species*					
Wetlands/Riparian Zones*					
Wildlife Habitat				Wildlife Biologist	
Native American Religious Concerns*					
Cultural Resources*				Archaeologist	
Areas of Critical Environmental Concern*				Wildlife Biologist	
Wild/Scenic Rivers*					
Wilderness*					
Cave/Karst Resources					
Outdoor Recreation					
Visual Resources				Outdoor Recreation Planner	
Low Income & Minority Population Concerns					
Access/Transportation				Natural Resource Specialist	

* "Critical Element" - must be addressed in all NEPA documents.
** "Affected Element" - must be addressed in the attached Environmental Assessment.